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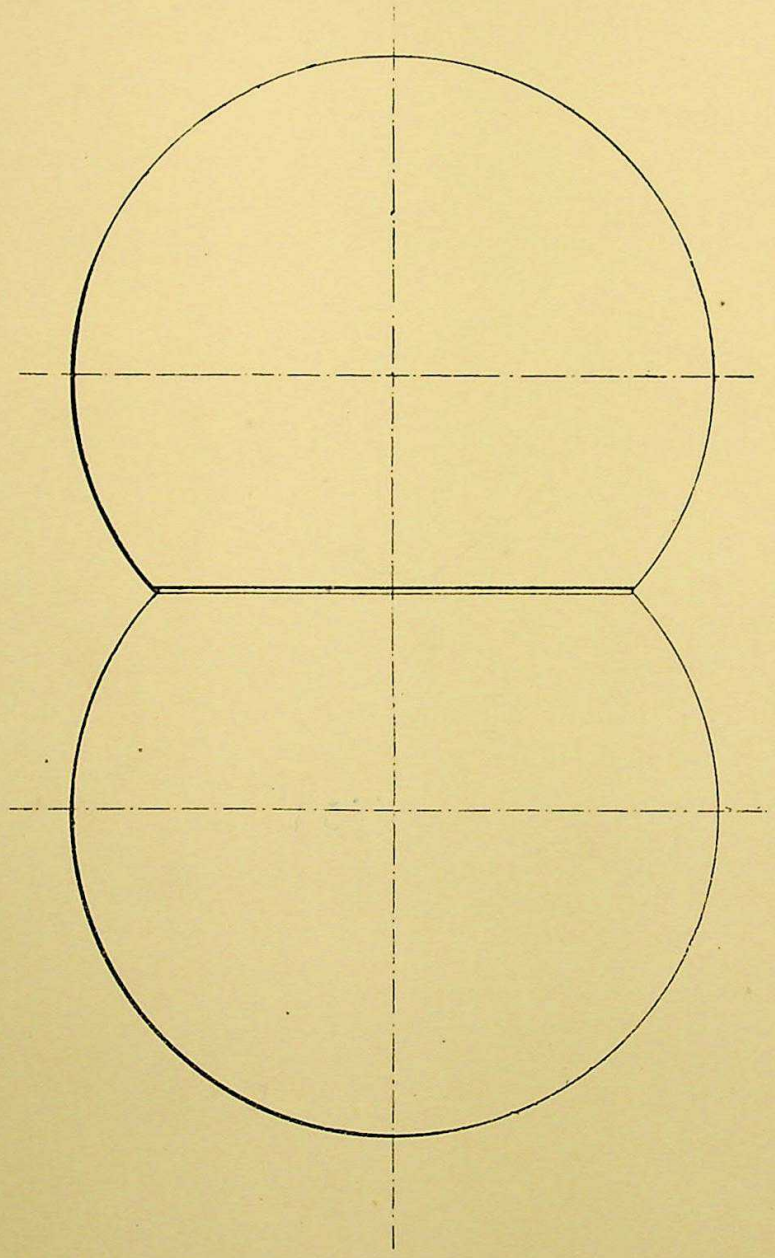
KAIL'S COMPLETE SPECIFICATION. (1 SHEET)

Open blow

Object lenses



[This Drawing is a full-size reproduction of the Original.]

LONDON.—Printed by DARLING and SON Ltd.
for Her Majesty's Stationery Office. 1896.

Malby & Sons, Photo-Litho

359/480

N° 22,813 A.D. 1895

Date of Application, 28th Nov., 1895

Complete Specification Left, 17th July, 1896—Accepted, 5th Sept., 1896

PROVISIONAL SPECIFICATION.

Improved Object Lenses for Binocular Telescopes, Opera, Field, and like Glasses.

I, JULES KAIL, of 95 Boulevard Beaumarchais, Paris, in the Republic of France, do hereby declare the nature of this invention to be as follows:—

In the manufacture of binocular telescopes, opera glasses, field glasses and the like, the size of the object lenses is limited by the distance between the eyes. Even where the glasses happen to be tangential, their maximum diameter would still be limited by the distance at which the eyes are apart.

Now the object glasses or lenses of the improved construction hereinafter described enables the maximum diameter of the present objectives to be increased within much wider limits than hitherto.

In carrying out my invention I take object lenses, either achromatized or not, of a diameter larger than the distance between the eyes, and I cut their edges in the shape of a segment of a circle and at such a distance from the centre that, if the two lenses be moved nearer to each other along the line of the cut, the centres of the lenses will be separated from each other by a space equal to that at which the eyes are placed apart.

It will be understood that I have done away with only a small portion of the edges of the lenses and, by so doing, have realized all the advantages resulting from the employment of large object glasses, without resorting to any complicated construction.

Notwithstanding the slight deformation of the optical field, its value may be augmented, or the clearness or magnifying power may be increased in any desired proportions. Any existing oculars or eye pieces may be employed in connection with these improved object lenses without requiring any alteration.

Dated this 28th day of November 1895.

HASELTINE, LAKE & Co.,
45 Southampton Buildings, London, W.C., Agents for the Applicant.

COMPLETE SPECIFICATION.

Improved Object Lenses for Binocular Telescopes, Opera, Field, and like Glasses.

I, JULES KAIL of 95 Boulevard Beaumarchais, Paris, in the Republic of France, Optical Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

In the manufacture of binocular telescopes, opera glasses, field glasses and the like, the size of the object lenses is limited by the distance between the eyes. Even where the glasses happen to be tangential, their maximum diameter would still be limited by the distance at which the eyes are apart.

Now the object glasses or lenses of the improved construction hereinafter described enables the maximum diameter of the present objectives to be increased within much wider limits than hitherto.

[*Price* 8*d.*]

Kail's Improved Object Lenses for Binocular Telescopes, Opera, Field, and like Glasses.

In carrying out my invention I take object lenses, either achromatized or not, of a diameter larger than the distance between the eyes, and I cut their edges in the shape of a segment of a circle and at such a distance from the centre that, if the two lenses be moved nearer to each other along the line of the cut, the centres of the lenses will be separated from each other by a space equal to that at which the eyes are placed apart.

By this means I obtain an arrangement such as that shown diagrammatically in the accompanying drawing.

It will be understood that I have done away with only a small portion of the edges of the lenses and, by so doing, have realized all the advantages resulting from the employment of large object glasses, without resorting to any complicated construction.

Notwithstanding the slight deformation of the optical field, its value may be augmented, or the clearness or magnifying power may be increased in any desired proportions. Any existing oculars or eye pieces may be employed in connection with these improved object lenses without requiring any alteration.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is :—

Improved object lenses for binocular telescopes enabling the present maximum limit of diameter of object glasses to be largely extended ; the improvement consisting in taking large object glasses and making a notch at the edge of each in the form of a segment of a circle ; such notch enabling the centres of the glasses to be brought nearer to each other, so that the distance between them may equal the distance between the eyes, or that they may be placed at any other distance less than the diameters of the lenses or glasses, as hereinabove specified.

Dated this 16th day of July 1896.

HASELTINE, LAKE & Co.,
45 Southampton Buildings, London, W.C., Agents for the Applicant.

London : Printed for Her Majesty's Stationery Office, by Darling & Son, Ltd.—1896